Inventors: Hoeffler, et al. Appl. Ser. No. 09/245,615

In the Claims:

The following listing of claims replaces all prior versions and listings of claims in the case.

1 - 30 (Cancelled).

- 31. (Currently amended): A kit comprising:
 - (a) [[a]] an antibody microarray comprising a plurality of antibodies located at discrete locations on a solid surface, wherein the plurality of discrete locations are arranged in a spatially addressable ordered matrix, wherein the antibodies are arranged in a spatially addressable ordered matrix, wherein each discrete location comprises two or more discrete foci of an antibody; and
 - (b) a first reagent, for labeling a cell lysate with a first fluorescent dye, and a second reagent for labeling a cell lysate with a second fluorescent dye.
- 32. (Previously presented): A kit according to claim 31 further comprising instructions for comparing protein expression in two or more populations of cells or characterizing a cell based on the pattern of protein expression produced thereby.
- (Original): A kit according to claim 31 wherein the antibodies are monoclonal antibodies, polyclonal antibodies or antibody fragments.
- 34. (Original): A kit according to claim 33 wherein the antibody fragments are single chain antibodies.
- 35. (Original): A kit according to claim 31 wherein the antibodies are recombinant antibodies.
- (Original): A kit according to claim 31 further comprising reagents for detecting an antigen and instructions for use thereof.

37 - 50 (Cancelled).

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 (Previously presented): The kit according to claim 31 wherein the source of the antibodies at each discrete location is known.

52 - 53 (Cancelled).

54. (Currently amended): The kit according to claim 31 wherein the space between the discrete locations-foci is treated to minimize non-specific binding to the solid surface.

55 - 59 (Canceled).

- (Currently amended): The kit according to claim 31, wherein between 0.01 nanoliters1 ng and 100 nanoliters-ng of the antibodies are spotted at each discrete location on the solid surface.
- (Previously presented): The kit according to claim 31, wherein the microarray comprises 600 discrete locations per square centimeter.
- (Previously presented): The kit according to claim 51, wherein the source of the antibodies is a known hybridoma cell line.

63 - 65 (Canceled).

 (Previously presented): The kit according to claim 31, wherein the plurality of antibodies recognize mammalian proteins.

67 - 68 (Canceled).

- (Currently amended): The kit according to claim 31, further comprising a second <u>antibody</u> microarray-comprising a plurality of antibodies located at discrete locations on a second solid surface.
- (Currently amended): A microarray comprising a plurality of <u>discrete_antibodies_located at discrete_locations</u> on a solid surface, wherein the <u>plurality of discrete_locations are arranged in a spatially</u>

addressable ordered matrix, wherein each discrete location comprises two or more discrete foci of an antibody-the antibodies are a collection of 1000 different antibodies and recognize proteins of a first species.

- (Currently amended): The microarray according to claim 70, wherein the plurality of microarray
 comprises up to about 1000 different antibodies-recognize manimalian proteins.
- (Currently amended): The microarray according to claim 70, wherein between 0.01 nanoliters and 100 nanoliters about 1 ng to about 1 µg of the antibodies each antibody is -are-spotted at each of the discrete location focion the solid surface.
- (Currently amended): The microarray according to claim 70, wherein the microarray comprises
 600 diserete-addressable locations per square centimeter.
- (Currently amended): The kit according to claim 31, wherein the microarray comprises antibodies spotted at [[at]] least 48 discrete-addressable locations.
- (Currently amended): The kit according to claim 74, wherein the microarray comprises antibodies spotted at [[at]] least 90 discrete-addressable locations.
- (Previously presented): The kit according to claim 31, wherein the microarray comprises a collection of 1000 different antibodies.

77 - 79 (Cancelled).

- (Previously presented): The microarray according to claim 70, wherein the microarray further
 comprises an antigen from a cell lysate, wherein the antigen is bound to a characterized antibody
 located on the solid surface.
- (Currently amended): The kit according to claim 75, wherein the microarray comprises antibodies spotted at [fat] least 384 discrete addressable locations.

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- 82. (Currently amended): The kit according to claim 31, wherein the microarray comprises antibodies spotted at [[at]] least 60 discrete-addreassable locations, wherein the antibodies bind mammalian proteins.
- (Currently amended): The kit according to claim 31, wherein the microarray comprises antibodies spotted at [[at]] least 192 discrete locations, wherein the antibodies bind mammalian proteins.
- 84. (New): The microarray according to claim 70, wherein the solid surface comprises at least one of an aldehyde-treated slide, a nitrocellulose-treated slide or a nylon-treated slide.
- (New): The microarray according to claim 70, wherein each addressable location comprises four or more discrete foci of an antibody.
- 86. (New): The kit according to claim 31, wherein the amount of antibody in each of the discrete foci in each discrete location is substantially different.
- 87. (New): The kit according to claim 31, wherein the amount of antibody in each of the discrete foci in each discrete location is substantially the same.
- 88. (New): The kit according to claim 31, wherein between about 1 ng to about 1 µg of each antibody is spotted at each of the discrete foci.